

**PARTS LIST** To assist examination; may be canceled upon allowance at option of Examiner.

20 Cascade scrubber assembly	38 Inner race clearance recess
2a In-feed Cassette	40 Mandrel inner end clearance recess
2b Discharge Cassette	41 Mandrel end
4 End wall	42 Inner rotating race of idler bearing
6a, b Pick-and-place robots	44 Outer stationary race of idler bearing
a: In-feed b. Output	46 Set screw securing idler bearing inner race to mandrel
8, 8' Disks/Substrates	
10, 10' PVC Brushes	48 Wear particulates flush leak path
12, 12' Hollow Mandrel with surface groove fluid manifold 64	50 PVA Brush
	52 Perforated brush core (sleeve)
14 Mandrel Idler Bearing Housing	54 Piston central bore
16 Scrubber Housing (Sump portion)	56 Inlet fluid feed union
17 Direction of Substrate travel	58 Bearing housing O-ring seal
18 Idler bearing bore	60 Outer race concave surface
22 Idler Bearing, inner, outer race & bearings	62 PVA brushes
24 Slideable feed piston	25 Piston bore in idler housing 14
26 Fluid inlet supply	64 Fluid distribution groove in mandrel surface
28 Nozzle	66 Recess in housing 14 for fluid pressure on 32
29 Mandrel central bore	68 perforations in polypropylene sleeve 52
30 Wear contact area	70 Radial fluid supply bore in mandrel wall
32 Inventive flanged piston with no nozzle	
34 Piston flange (stepped)	
36 Recess, may be stepped	